IN THE CLAIMS

Please amend the claims as follow:

1. (Previously Presented) The apparatus of claim 19, further comprising:

a first motor coupled to the sloping wall of the input hopper; and

a first distribution mechanism driven by the first motor and located inside the hopper to move the agricultural feed adjacent to the sloping wall in order to prevent feed bridging before the primary compression mechanism, the distribution mechanism powered by the first motor.

2. (Currently Amended) The apparatus of claim 1, wherein the first motor is a rotary motor and wherein the distribution mechanism further comprises an elongated first bar attached along its length to the first motor such that the first motor sweeps the first bar in a curvical motion in a plane substantially parallel to and along the sloping wall, wherein a plane of the first bar is substantially parallel to the sloping wall and an axis of rotation of the first motor is substantially perpendicular to the sloping wall.

3. (Original) The apparatus of claim 2, wherein a leading edge of the first bar forms a non-parallel angle relative to a radius of rotation of the first bar.

4. (Original) The apparatus of claim 2, further comprising:

a second motor coupled to the sloping wall of the input hopper; and

an elongated second bar attached along its length to the second motor such that the second motor sweeps the second bar in a curvical motion along the sloping wall.

5. (Previously Presented) An agricultural bagger apparatus for compacting feed into a horizontally deployed bag, the apparatus comprising:

a primary compression mechanism;

an input hopper that receives agricultural feed, the hopper having a sloping wall and a lower end exit chute located to transfer the agricultural feed into the primary compression mechanism;

a tunnel having an internal cavity, and connected to the primary compression mechanism to receive the feed output from the primary compression mechanism and operable to extrude the feed into the bag deployed from around the tunnel;

a secondary compression mechanism located above the primary compression mechanism and connected to the tunnel to displace pressure from above the primary compression mechanism and toward an upper portion of the tunnel cavity;

a first motor coupled to the sloping wall of the input hopper;

a first distribution mechanism driven by the first motor and located inside the hopper to move the agricultural feed adjacent to the sloping wall in order to prevent feed bridging before the primary compression mechanism, the distribution mechanism powered by the first motor, wherein the first motor is a rotary motor and wherein the distribution mechanism further comprises an elongated first bar attached along its length to the first motor such that the first motor sweeps the first bar in a curvical motion along the sloping wall;

a second motor coupled to the sloping wall of the input hopper;

an elongated second bar attached along its length to the second motor such that the second motor sweeps the second bar in a curvical motion along the sloping wall;

a third bar hingedly connected to a wall of the hopper;

a fourth bar hingedly connected to the third bar and hingedly connected to the first bar near an end distal to its connection to the first motor.

a fifth bar hingedly connected to a wall of the hopper;

a sixth bar hingedly connected to the fifth bar and hingedly connected to the second bar near an end distal to its connection to the second motor.

6. (Original) The apparatus of claim 5, wherein the fourth bar rotates substantially in a plane, is substantially flat in the plane of its rotation, and has an end segment having a leading edge that forms a non-parallel angle relative a radius of its rotation.

7. (Original) The apparatus of claim 5, further comprising a cover attached to the hopper that covers an upper portion of the distribution mechanism to prevent the feed from binding from one or more of the connections.

8.-18. (Cancelled)

19. (Currently Amended) An agricultural bagger apparatus for compacting feed into a horizontally deployed bag, the apparatus comprising:

a primary compression mechanism;

an input hopper that receives agricultural feed, the hopper having a sloping wall and a lower end exit chute located to transfer the agricultural feed into the primary compression mechanism;

a tunnel having an internal cavity, and connected to the primary compression mechanism to receive the feed output from the primary compression mechanism and operable to extrude the feed into the bag deployed from around the tunnel; and

a secondary compression mechanism located above the primary compression mechanism and connected to the tunnel to ~~displace pressure~~ push feed away from above the primary compression mechanism and substantially only toward an upper portion of the tunnel cavity during operation of the primary compression mechanism.

20. (Previously Presented) The apparatus of claim 19, wherein the secondary compression mechanism is located on the exterior of the feed tunnel and extending into the feed tunnel above the primary compression mechanism.

21. (Currently Amended) The apparatus of claim 19, wherein the secondary compression mechanism of includes one or more motorized pistons having substantially enclosed sidewalls.

22. (Previously Presented) The apparatus of claim 21, wherein the secondary compression mechanism includes a hinged apparatus on one side of the feed tunnel wall and connected to the piston arm.

23. (Previously Presented) The apparatus of claim 22, wherein the secondary compression mechanism includes a hinged apparatus that protrudes outward of the feed tunnel wall at the non-compacting stage and extending inward into the feed tunnel at the compacting stage above the primary compression mechanism.

24. (Previously Presented) The apparatus of claim 19, wherein the secondary compression mechanism compacts the feed above the primary compression mechanism by adding pressure to the feed.

25.-26. (Cancelled)

27. (Previously Presented) The apparatus of claim 37, further comprising:

means for displacing pressure along the sloping wall toward the primary compression mechanism in order for the feed to easily fall through the hopper to the primary compression mechanism.

28. (Currently Amended) The apparatus of claim 27, wherein the means for displacing pressure includes means for sweeping the feed along the sloping wall in a curvical motion in a plane substantially parallel to the sloping wall.

29. (Previously Presented) The apparatus of claim 27, further comprising means for agitating the feed at a circumference of the curvical motion at a distance from the sloping wall in order for the feed to easily fall through the hopper to the primary compression mechanism.

30. (Currently Amended) The apparatus of claim 29, wherein the means for displacing pressure further comprises means for sweeping the feed along the sloping wall in a first curvical motion and in a second separated curvical motion, both in a plane substantially parallel to and along the sloping wall.

31. (Currently Amended) The apparatus of claim 27, wherein the means for displacing pressure further comprises means for sweeping the feed along the sloping wall in two separated curvical motions in a plane substantially parallel to and along the sloping wall.

32. (Previously Presented) The apparatus of claim 31, further comprising means for agitating the feed at a circumference of the two curvical motions and at a distance from the sloping wall in order for the feed to easily fall through the hopper to the primary compression mechanism.

33. (Currently Amended) ~~The apparatus of claim 32, further comprising~~ An apparatus for improving the flow of agricultural feed in an agricultural feed stock bagging machine, the apparatus comprising:

a tunnel for deploying a bag and for receiving compressed feed to extrude into the bag;

a primary compression mechanism fed by a hopper with a sloping wall;

means for displacing pressure within the tunnel from above the primary compression mechanism to a higher portion of the tunnel interior cavity during operation of the primary compression mechanism; and

means for displacing pressure along the sloping wall toward the primary compression mechanism in order for the feed to easily fall through the hopper to the primary compression mechanism, wherein the means for displacing pressure along the sloping wall includes means for sweeping the feed along the sloping wall in two separated curvical motions along the sloping wall;

means for agitating the feed at a circumference of the two curvical motions and at a distance from the sloping wall in order for the feed to easily fall through the hopper to the primary compression mechanism; and

means for directing the feed beyond an upper portion of the curvical motion in order that the feed is primarily swept at a lower portion of the curvical motions.

34. (Previously Presented) The apparatus of claim 27, wherein the means for displacing pressure further comprises means for sweeping the feed along the sloping wall in a curvical motion along the sloping wall.

35. (Previously Presented) The apparatus of claim 34, further comprising means for agitating the feed at a circumference of the curvical motion and at a distance from the sloping wall in order for the feed to easily fall through the hopper to the primary compression mechanism.

Claim 36 (Cancelled).

37. (Currently Amended) An apparatus for improving the flow of agricultural feed in an agricultural feed stock bagging machine, the apparatus comprising:

a tunnel for deploying a bag and for receiving compressed feed to extrude into the bag;

a primary compression mechanism fed by a hopper with a sloping wall; and

means for ~~displacing pressure~~ moving feed within the tunnel from above the primary compression mechanism to a higher portion of the tunnel interior cavity during operation of the primary compression mechanism.

38. (Previously Presented) The apparatus of claim 21, wherein the one or more motorized pistons are periodically activated for a compression cycle and then withdrawn, leaving space for more feed to be deposited by primary compression mechanism.

39. (Previously Presented) The apparatus of claim 21, wherein the one or more motorized pistons are periodically activated for an approximately one-second compression cycle that occurs once every ten seconds such that the primary compression mechanism is filling a volume in back of the one or more motorized pistons for approximately nine seconds, then the one or more motorized pistons are extended into the tunnel for less than about one second and then withdrawn, leaving space for more feed to be deposited by the primary compression mechanism.

40. (Previously Presented) The apparatus of claim 19, further comprising:

a first distribution mechanism driven in a reciprocating motion having both up and down components adjacent to the sloping wall in order to prevent feed bridging before the primary compression mechanism.

41. (New) An apparatus for compacting feed into a horizontally deployed bag, the apparatus comprising:

a primary compression mechanism;

an input hopper that receives agricultural feed and delivers the feed into the primary compression mechanism;

a tunnel connected to the primary compression mechanism to receive the feed output from the primary compression mechanism and extrude the feed into the bag deployed from around the tunnel; and

a secondary compression mechanism located above the primary compression mechanism and configured to push only feed in an upper half of the tunnel away from above the primary compression mechanism and toward an upper portion of the tunnel cavity during operation of the primary compression mechanism.

42. (New) The apparatus of claim 41, wherein the secondary compression mechanism of includes one or more reciprocating pistons having substantially enclosed sidewalls, and wherein the one or more pistons are periodically activated for an approximately one-second compression cycle that occurs once every ten seconds such that the primary compression mechanism is filling a volume in back of the one or more motorized pistons for approximately nine seconds, then the one or more motorized pistons are extended backward into the tunnel for less than about one second and then withdrawn, leaving space for more feed to be deposited by the primary compression mechanism.